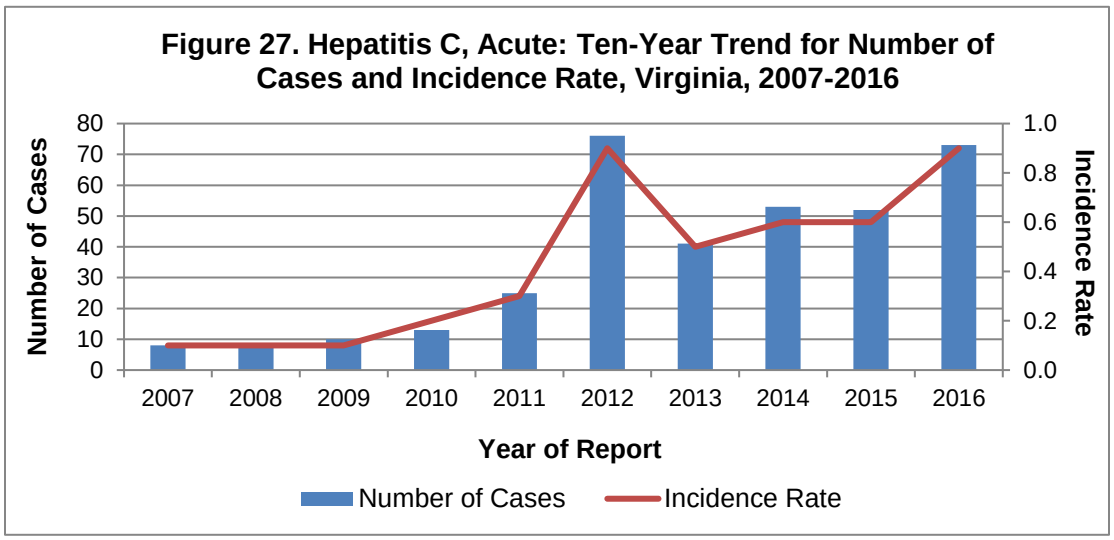
Hepatitis C, Acute

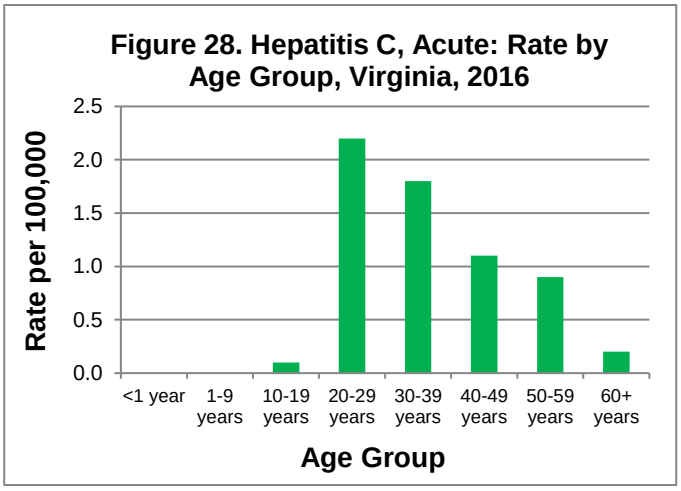
Agent: Hepatitis C virus (HCV), a member of the Flavivirus family
Mode of Transmission: Hepatitis C is primarily spread when blood from someone infected with HCV enters the body of someone not infected, usually by passing through the skin. The most common means of HCV infection in the U.S. is injection drug use, including the sharing of needles, syringes, or other equipment used to inject drugs. Infection can also occur from needlestick injuries in health care settings, or by being born to an HCV-infected mother. Infrequently, the virus can be spread by sharing personal items contaminated with infectious blood (razors or toothbrushes), or by having sexual contact with someone infected with HCV. Before 1992, when blood screening for HCV became available, receipt of donated blood, blood products, and organs was a common means of transmission. This is now a rare occurrence.
Signs/Symptoms: Often (70-80% of the time), no symptoms occur. Fever, fatigue, loss of appetite, nausea, abdominal discomfort, and jaundice are common symptoms when they do occur.
Prevention: Preventive measures include avoiding behaviors that can spread the disease, including sharing needles or other equipment used to inject drugs. Standard precautions and infection control practices should be followed during all medical and dental procedures. Any body piercing or tattooing should take place in a licensed facility. Sharing of personal items potentially contaminated with blood, such as razors and toothbrushes, should be avoided. Safe sexual practices and not donating blood if infected with HCV are also recommended.
Other Important Information: HCV infections become chronic in 75-85% of cases. As people with chronic HCV infection age, they are at higher risk for developing chronic liver disease, such as cirrhosis and liver cancer. No vaccine is available to prevent HCV.

Hepatitis C, Acute: 2016 Data Summary	
Number of Cases:	73
5-Year Average Number of Cases:	49.4
% Change from 5-Year Average:	+48%
Incidence Rate per 100,000:	0.9

In 2016, 73 cases of acute hepatitis C infection were reported in Virginia, compared to 52 cases reported in 2015. This is a 48% increase when compared to the 5-year average of 49.4 cases per year (Figure 27). While incidence is likely increasing, it is difficult to assess a true rise in cases due to a recent change made to the national surveillance case definition. In 2016, a probable case classification was added which, for surveillance purposes, now includes persons who are hepatitis C antibody positive to be considered a case. This change in case classification has led to an increase in the number of reported acute hepatitis C cases in 2016. However, it is likely that the true number of acute hepatitis C cases is still undercounted due to the large percentage of acute hepatitis C infections that go undetected because of the absence of clinical symptoms.



The highest incidence rate (2.2 per 100,000) occurred in the 20-29 year age group, followed by the 30-39 year age group (1.8 per 100,000). No cases of acute hepatitis C infection were reported in persons less than 10 years of age (Figure 28). Race information was not reported for 26% of cases. Among those with a known race, incidence was highest among the white population (0.8 per 100,000) compared to the black and "other" race populations (each with 0.3 per 100,000, respectively). Incidence was slightly higher among females (1.0 per 100,000) compared to males (0.8 per 100,000).



In 2016, 73% percent of acute hepatitis C cases occurred in two regions in the state. The largest number of cases and highest incidence rate were seen in the northwest region with 30 cases and an incidence of 2.3 per 100,000. This was followed closely in the southwest region with 23 cases and a rate of 1.7 per 100,000. Eleven cases were from the central region (0.8 per 100,000), five cases were from the northern region (0.2 per 100,000), and four cases were from the eastern region (0.2 per 100,000). Incidence rates by locality can be seen in the map below. Illness onset occurred throughout the year with 29% of cases having illness onset in the first quarter of the year. No outbreaks of acute hepatitis C were reported in Virginia during 2016. One death was attributed to acute hepatitis C infection.

Certain behaviors can place a person at greater risk for infection with hepatitis C virus. In Virginia risk factor information is not collected on every case. Among the 73 cases of acute hepatitis C reported in 2016, 14 of the individuals reported injecting drugs; nine reported using non-injected street drugs; eight reported receiving a tattoo; three reported having their body pierced; and eight reported being incarcerated. While these are potential risk factors for this infection, it cannot be determined if these exposures were the source of the infection.

In addition, 11,332 newly identified hepatitis C cases were reported in 2016. These cases were classified as chronic hepatitis C cases for surveillance purposes because they were either ruled out as acute hepatitis C cases or their acute status could not be established because the case was not investigated. The median age of these cases was 50 years. Risk factor information is not routinely collected on chronic hepatitis C cases; however, 1,247 were institutionalized at the time of their diagnosis.

Hepatitis C, Acute, Incidence Rate by Locality
Virginia, 2016